

CLINICAL PRACTICE

Clinical Images

A Necrotizing Wound After Caesarean Delivery

Wouter Van Moerkercke, MD¹ and François D'Heygere, MD²¹Department of Gastroenterology and Hepatology, University Hospitals Leuven, Leuven, Belgium; ²Department of Gastroenterology and Hepatology, AZ Groeninge, Kortrijk, Belgium.**KEY WORDS:** pyoderma gangrenosum; autoimmunity; caesarean section.

J Gen Intern Med 25(11):1242-3

DOI: 10.1007/s11606-010-1429-3

© Society of General Internal Medicine 2010

A previously healthy 23-year-old female developed a painful necrotizing wound approximately 5 days after a caesarean section (Fig. 1). Her laboratory results showed a leukocytosis of 43,200/mm³ (reference 4,500–11,000) and a C-reactive protein (CRP) level of 462 mg/L (reference 0–5 mg/L).

Based on appearance and lack of clinical improvement after the initiation of broad spectrum antibiotics, a presumptive diagnosis of pyoderma gangrenosum (PG) was made. Cyclosporine therapy was initiated with prompt improvement of the wound (Figs. 2 and 3).

PG is an uncommon skin disease that frequently presents as a painful ulcer. It is more frequent in women and has the highest incidence between 25 and 55 years of age. Approximately 50% of cases are associated with systemic diseases such as inflammatory bowel disease (mainly UC), rheumatoid arthritis, systemic lupus erythematosus and hematological malignancies or solid tumours of colon, bladder, breast, lung or ovary.^{1,2}

Minor trauma or surgery of the skin can initiate the pathologic process—called the ‘pathergy phenomenon’—although it is less frequently associated with a caesarean section.³



Figure 1. Wound seen twenty-seven days postoperatively.

Received January 26, 2010

Revised March 29, 2010

Accepted May 27, 2010

Published online June 22, 2010



Figure 2. Wound seen four days after the initiation of cyclosporine therapy. There was already an improvement with a diminished swelling of the surrounding skin and the disappearance of the erythematous margin.

Diagnosis depends on clinical presentation, exclusion of other causes—such as infection, malignancy and vasculitis—as well as response to treatment. Biopsy in PG is non-specific but can be helpful to rule out other diseases.

Corticosteroids are first-choice therapy and often lead to a rapid and persisting healing.^{1,4-6} In steroid refractory cases, immunomodulatory therapy such as cyclosporines (typically 5 mg/kg/day) may give long-lasting remission. Intravenous immunoglobulins, infliximab, mycophenolate mofetil, tacrolimus and plasmapheresis have been used.



Figure 3. Wound seen fifty-five days after the start of cyclosporine therapy.

Corresponding Author: Wouter Van Moerkercke, MD; Department of Gastroenterology and Hepatology, University Hospitals Leuven, Herestraat 49 3000, Leuven, Belgium (e-mail: wouter.vanmoerkercke@uzleuven.be).

REFERENCES

1. **Brooklyn T, Dunnill G, Probert C.** Diagnosis and treatment of pyoderma gangrenosum. *BMJ*. 2006;333:181–4.
2. **Callen JP.** Pyoderma gangrenosum. *Lancet*. 1998;351:581–5.
3. **Rönnau AC, Vons Chmiedeberg S, Bielfeld P, Ruzicka T, Schuppe HC.** Pyoderma gangrenosum after cesarean delivery. *Am J Obstet Gynecol*. 2000;183:502–4.
4. **Reichrath J, Bens G, Bonowitz A, Tilgen W.** Treatment recommendations for pyoderma gangrenosum: an evidence-based review of the literature based on more than 350 patients. *J Am Acad Dermatol*. 2005;53:273–83.
5. **Ehling A, Karrer S, Klebl F, Schäffler A, Müller-Ladner U.** Therapeutic management of pyoderma gangrenosum. *Arthritis Rheum*. 2004;50:3076–84.
6. **Griffiths CE, Katsambas A, Dijkmans BA, et al.** Update on the use of ciclosporin in immune-mediated dermatoses. *Br J Dermatol*. 2006;155 (Suppl 2):1–16.